## In the Claims:

Please amend the claims as follows:

1. (Currently Amended) A process for increasing the <u>a</u> rate of <u>a</u> biocatalysis reaction[[s]], which comprises:

applying a direct current (<u>DC</u>) electric field to a reaction mixture, wherein the reaction mixture and the electrodes used to apply said electric field are separated such that the reaction mixture does not come into contact with said electrodes.

- 2. (Original) A process according to claim 1, wherein said electric field is applied for a sufficient time to stimulate the biocatalysis reaction in the reaction mixture.
- 3. (Currently Amended) A process according to claim 1-or-2, wherein said reaction mixture and said electrodes are separated by a separation membrane.
- 4. (Original) A process according to claim 3, wherein said separation membrane is any of an ion exchange membrane or a microporous membrane.
- 5. (Original) A process according to claim 4, wherein said separation membrane is a bipolar ion exchange membrane.
- 6. (Currently Amended) A process according to <u>claim 1</u> any of claims 1 to 4, wherein said electrodes form part of an electrochemical reactor.
- 7. (Currently Amended) A process according to claim 6, wherein said electrochemical reactor forms part of an electrodialysis stack, wherein charged organic products in the biocatalysis reaction mixture medium can be removed by electrodialysis.
- 8. (Currently Amended) A process according to <u>claim 1</u> any of <u>claims 1</u> to 7, wherein said reaction <u>mixture medium</u> is contained between a bipolar membrane on the <u>a cathode-facing side</u> and an anion selective membrane on the <u>an anode-facing side</u> of

said reaction mixture medium.

- 9. (Currently Amended) A process according to <u>claim 1</u>-any of claims 1 to 8, wherein the reaction <u>mixture medium</u> comprises a cationic buffer system, with the <u>an</u> organic product forming the an anionic component.
- 10. (Currently Amended) A process according to claim 9, wherein the DC <u>electric</u> <u>field</u> <del>current</del> applied is adjusted to control the pH of the reaction mixture.
- 11. (Currently Amended) A process according to claim 10, wherein the adjustment to the DC electric field current is automatically controlled under the control of a computer program.
- 12. (Currently Amended) A process according to <u>claim 7-any of claims 7 to 11</u>, wherein the biocatalysis <u>reaction</u> and <u>the</u> electrodialysis <u>stages</u> are operated in separate, but linked, reactors, where the biocatalysis reaction <u>mixture medium</u> containing active biomass can be recirculated continuously to the <u>electrodialysis</u> <u>electrochemical</u> reactor.
- 13. (Currently Amended) A process according to <u>any preceding claim\_1</u>, wherein the biocatalysis reaction <del>comprises any of</del> <u>is selected from</u> a single enzyme biotransformation reaction, a fermentation process or <u>and</u> a reaction <del>catalysed</del> catalyzed by an isolated enzyme system.
- 14. (Currently Amended) A process according to any preceding claim\_1, wherein the reaction mixture comprises any of growing or resting microbial cultures.
- 15. (Currently Amended) A process according to claim 14, wherein said microbial mixtures cultures comprise immobilised immobilized cultures of yeast, bacteria or fungi.
- 16. (Currently Amended) A process according to claim 15, wherein said cultures are

immobilised immobilized on the surfaces or in the pores of beads.

- 17. (New) A process according to claim 8, wherein the reaction mixture comprises a cationic buffer system, with an organic product forming an anionic component.
- 18. (New) A process according to claim 8, wherein the reaction mixture comprises immobilized microbial cultures of yeast, bacteria or fungi.
- 19. (New) A process according to claim 8, wherein the reaction mixture comprises immobilized microbial cultures on surfaces or in pores of beads.
- 20. (New) A process according to claim 9, wherein the reaction mixture comprises immobilized microbial cultures of yeast, bacteria or fungi on surfaces or in pores of beads.